

### ABSTRACT OF DISCLOSURE

A spatial motion recognition system capable of recognizing motions in three-dimensional space as handwritings on a two-dimensional plane is provided. The system recognizes motions of a system body occurring in space based on position change information of the system body that is detected in a motion detection unit, displays the recognized motion information on a screen, or transmits to an external device the recognized motion information through a transmission/reception unit or a control signal corresponding to the motion information. A control unit produces a virtual handwriting plane having the shortest distances with respect to respective positions in predetermined time intervals based on three-dimensional track information obtained through tracking, and projects the respective positions in the predetermined time intervals onto the virtual handwriting plane to recover the motions in space.